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VALVE AUTOMATION SYSTEMS

ELCO-MATIC<sup>®</sup>  
INTERNATIONAL

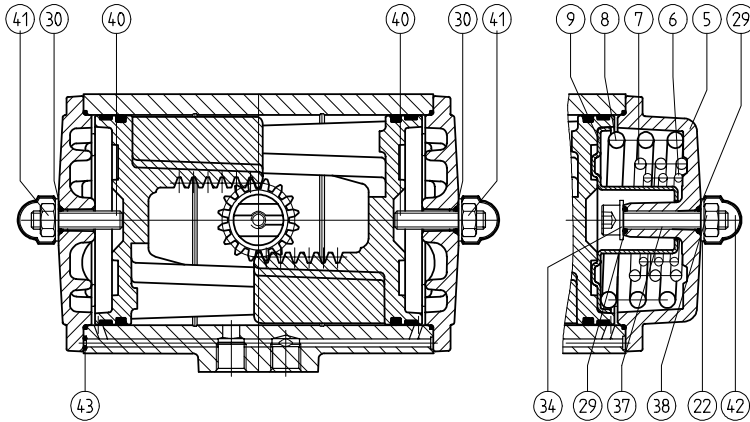
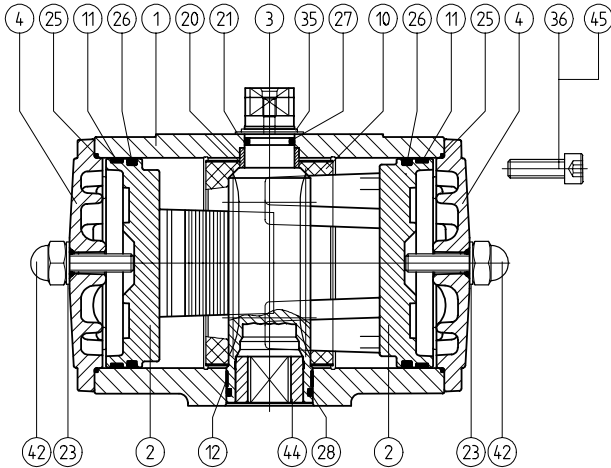
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Nr.:

A.1.101.33

Date:

June '99



DOUBLE ACTING ED

SINGLE ACTING ES

Parts		Materials		Executions			
Nr.	Description	Qty.	Description	Specification	Std	S.S. Shaft	CSR
1	Body	1	Aluminum Alloy	UNS A13600, ASTM B85	-	-	5
2	Piston	2	Aluminum Alloy	UNS A03560, ASTM B26	-	-	-
3	Drive Shaft	1	Aluminum Alloy	UNS 1 77075, ASTM 7075 T6	1	6	6
4	End Cap EDA	2	Aluminum Alloy	UNS A13600, ASTM B85	-	-	5
5	End Cap ESA	2	Aluminum Alloy	UNS A13600, ASTM B85	-	-	5
6	Spring- inner	2	Carbon Spring Steel	UNS G10860, ASTM A228	2	2	2
7	Spring- mid	2	Carbon Spring Steel	UNS G10860, ASTM A228	2	2	2
8	Spring- outer	2	Carbon Spring Steel	UNS G10860, ASTM A228	2	2	2
9	Spring Holder	2	Steel	C45, DIN 17200	3	3	3
10	* Guide Band	1	Nylatron	PA6.6 + MoS2	-	-	-
11	* Guide Band	2	PTFE, Carbon filled	PTFE + 25% C	-	-	-
12	* Bearing Bush	1	Nylatron	PA6.6 + MoS2	-	-	-
20	* Bearing Bush	1	Delrin	POM	-	-	-
21	* O-ring	1	Nitrile Rubber	Buna N	-	-	-
22	* Washer ESA	2	Nylon	PA6	-	-	-
23	* Washer EDA	2	Nylon	PA6	-	-	-
25	* O-ring	2	Nitrile Rubber	Buna N	-	-	-
26	* O-ring	2	Nitrile Rubber	Buna N	-	-	-
27	* Washer	1	CRMZX100	-	-	-	-
28	* O-ring	1	Nitrile Rubber	Buna N	-	-	-
29	* O-ring	4	Nitrile Rubber	Buna N	-	-	-
30	* O-ring	2	Nitrile Rubber	Buna N	-	-	-
34	Washer ESA	2	Steel	C35	3	3	3
35	Spring Clip	1	Carbon Spring Steel	MIL - R-212 48B	2	7	7
36	End Cap Bolt EDA/ESA	8	Stainless Steel	AISI 304	-	-	-
37	Limit Stop Bolt ESA	2	Stainless Steel	AISI 304	-	-	-
38	Nut	2	Stainless Steel	AISI 304	-	-	-
40	Limit Stop Bolt EDA	2	Stainless Steel	AISI 304	-	-	-
41	Nut	2	Stainless Steel	AISI 304	-	-	-
42	Nut Cover	2	Polyethylene	PE	-	-	-
43	* O-ring	2	Nitrile Rubber	Buna N	-	-	-
44	Insert	1	Aluminum Alloy	UNS 1 6082, ASTM 6082	4	9	4
45	Threaded insert	8	Steel	UNS G10430, ASTM A29	3	3	3

\* Recommended spare parts (contained in Repair kits)

**Notes**

- 1 : Hard anodized
- 2 : Deltatone Coating
- 3 : Zinc plated and passivated
- 4 : Anodized
- 5 : CSR Coating (see 4.204.02)
- 6 : Stainless Steel Sandvic 1802, SS2382
- 7 : Stainless Steel X35CrM017
- 8 : Steel 9SMn28K, DIN 1651
- 9 : No insert, adaptor square direct in shaft

**Remark:** All materials are European origin, listed are the nearest US equivalents.

**Finish:** Standard : Two component polyurethane coating (see data sheet 4.204.01)  
CSR : CSR Coating (see data sheet 4.204.02)

CONSTRUCTION, PARTS AND MATERIALS E-SERIE ACTUATORS

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